

**Notice of Allowability**

Application No.

09/461,521

Applicant(s)

HOHENSEE ET AL.

Examiner

Art Unit

Chau Nguyen

2176

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amendment filed on 06/05/2006 and Interview conducted on 08/17/2006.
2. ☒ The allowed claim(s) is/are 1,2,4,5,11,12 and 14-20.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

*William L. Bashore*  
**WILLIAM BASHORE**  
**PRIMARY EXAMINER**

### **Examiner's Amendment**

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Applicant's representative, Mr. Eustace P. Isidore (Reg. No. 56,104) on August 17, 2006.

The application has been amended as follows:

1. (previously presented) In a data processing system having a central processing unit, and memory, a method for retrieving and presenting stored documents on one or more output devices that each requires device-specific presentation parameters, said method comprising:

    parsing a document into one or more subcomponents, said subcomponents collectively representing the document when compiled for output to a presentation device, wherein each of said one or more subcomponents have a determinable presentation complexity;

    identifying one or more presentation devices to which the document may be outputted, said identifying including determining a presentation format supported by each of the one or more presentation devices;

for each subcomponent, determining whether the subcomponent is complex based on an amount of processing required to convert said subcomponent from device-independent format to device-dependent format, wherein the subcomponent is determined to be a complex subcomponent if the subcomponent requires more than a predetermined amount of processing to convert from the device-independent format to the device-dependent format;

converting a copy of each complex subcomponent into a device-dependent format corresponding to the presentation format supported by each specific device of the one or more presentation devices for which the subcomponent is determined to be complex, wherein when multiple presentation devices are identified by the data processing system for completing subsequent presentations, multiple copies of the complex subcomponent are generated and converted into a specific presentation format supported by each of the multiple presentation devices;

storing, in device-independent format, each subcomponent that is not determined to be a complex subcomponent as a non-complex subcomponent, wherein said non-complex subcomponent requires less data processing to convert to said device-dependent format than the predetermined amount of data processing required for the complex subcomponent;

storing said complex subcomponents in said device-independent format and each of said device-dependent formats associated with the identified presentation devices, wherein multiple copies of the complex subcomponent are stored with a first

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copy being stored in device-independent format and each other copy being stored in a format supported by the respective presentation device.

2. (previously presented) The method of claim 1, further comprising:

when a request is received to output a copy of the document to a selected one of the multiple presentation devices, identifying the selected presentation device and the format supported by that selected presentation device;

assembling said document from said stored non-complex subcomponents and specific device-dependent copy of the complex subcomponents that are stored in the format supported by that selected presentation device; and

sending the non-complex and specific device-dependent copy of the complex subcomponents of the assembled document to said presentation device, wherein the selected presentation device does not have to convert complex subcomponents within the document into device-dependent format during an actual presentation period and overall processing time involved with document output to the presentation device is substantially reduced.

3. (previously canceled)

4. (previously presented) The method of claim 1, wherein identifying said presentation devices, further comprise:

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determining acceptable document formats for said presentation devices; and  
classifying said devices according to device-dependent characteristics.

5. (previously presented) The method of claim 2, further comprising:

receiving a request from a peripheral presentation device for said document;

determining whether said peripheral presentation device is known or unknown,  
wherein said peripheral presentation device is known if the peripheral presentation  
device is one of the one or more presentation devices identified in said identifying step  
and which as a copy of the complex subcomponents stored in the format supported by  
that peripheral presentation device; and

when the device is not known, completing the determining and converting steps  
prior to forwarding the subcomponents for generating the document to the peripheral  
presentation device.

6. (canceled)

7. (canceled)

8. (previously canceled)

9. (canceled)

10. (canceled)

11. (previously presented) In a data processing system having a central processing unit  
and memory, a computer program product on a computer readable medium having

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instructions for storing, retrieving and presenting stored documents on one or more output devices that each requiring different presentation parameters, said program product comprising:

instruction within said computer program product for parsing a document into one or more objects; and

instructions within said computer program product for parsing each object into one or more units, said units collectively representing the document when compiled for output to a presentation device, wherein each of said one or more units have a determinable presentation complexity;

instructions within said computer program product for identifying one or more presentation devices to which the document may be outputted, said identifying including determining a presentation format supported by each of the one or more presentation devices;

for each unit, instructions for determining whether the unit is complex based on an amount of processing required to convert said unit from device-independent format to device-dependent format, wherein the unit is determined to be a complex unit if the unit requires more than a predetermined amount of processing to convert from the device-independent format to the device-dependent format;

instructions within said computer program product for converting a copy of each complex unit into a device-dependent format corresponding to the presentation format supported by each specific device of the one or more presentation devices for which the unit is determined to be complex, wherein when multiple presentation devices are

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identified by the data processing system for completing subsequent presentations, multiple copies of the complex unit are generated and converted into a specific presentation format supported by each of the multiple presentation devices;

instructions within said computer program product for storing, in device-independent format, each unit that is not determined to be a complex unit as a non-complex unit, wherein said non-complex unit requires less data processing to convert to said device-dependent format than the predetermined amount of data processing required for the complex unit;

instructions within said computer program product for storing said complex units in said device-independent format and each of said device-dependent formats associated with the identified presentation devices, wherein multiple copies of the complex unit are stored with a first copy being stored in device-independent format and each other copy being stored in a format supported by the respective presentation device.

12. (previously presented) The computer program product of claim 11, further comprising:

instruction within said computer program product for identifying the selected presentation device and the format supported by that selected presentation device, when a request is received to output a copy of the document to a selected one of the multiple presentation devices;

instruction within said computer program product for assembling said document from said stored non-complex units and specific device-dependent copy of the complex units that are stored in the format supported by that selected presentation device; and

instruction within said computer program product for sending the non-complex and specific device-dependent copy of the complex units of the assembled document to said presentation device, wherein the selected presentation device does not have to convert complex units within the document into device-dependent format during an actual presentation period and overall processing time involved with document output to the presentation device is substantially reduced.

13. (previously canceled)

14. (previously presented) The computer program product of claim 11, wherein instructions for identifying said presentation devices, further comprises:

instructions within said computer program product for determining acceptable document formats for said presentation devices; and

instructions within said computer program product for classifying said devices according to device-dependent characteristics.

15. (previously presented) The computer program product of claim 11, further comprising:

instructions for receiving a request from a presentation device for said document;



instructions within said computer program product for determining whether said peripheral device is known or unknown, wherein said presentation device is known if the presentation device is one of the one or more presentation devices identified in said identifying step and which has a copy of the complex unit stored in the format supported by that presentation device; and

instructions within the computer program product for completing the determining and converting steps prior to forwarding the units for generating the document to the presentation device, when the presentation device is not known.

16. (previously presented) The computer program product of claim 12, further comprising:

when the request is received, instructions within the computer program product for determining whether there are device-dependent copies of complex units previously generated and stored for that selected presentation device;

when no device-dependent copies have been generated and there are complex subcomponents identified within the document:

instructions within the computer program product for dynamically generating a device-dependent copy of the complex units in the format supported by the selected presentation device; and

instructions within the computer program product for storing the device dependent copy of the complex unit generated for that selected presentation device.

17. (previously presented) The computer program product of claim 11, further comprising:

enabling user setting of a mode of processing and storage of documents form among a first mode and a second mode, wherein said first mode triggers a storage of complex units in both device-dependent and device-independent formats and the second mode stores all units in only device-independent format; and

triggering said automatic storage in device-dependent format only when said first mode is selected for processing, whereby subsequent presentations on the selected presentation device access the stored, device-dependent copies of the complex subcomponents to reduce presentation time.

18. (previously presented) The method of claim 2, further comprising:

when the request is received, determining whether there are device-dependent copies of complex subcomponents previously generated and stored for that selected presentation device;

when no device-dependent copies of complex subcomponents have been generated and there are complex subcomponents identified within the document:

dynamically generating a device-dependent copy of the complex subcomponents in the format supported by the selected presentation device; and

storing the device-dependent copy of the complex subcomponents generated for that selected presentation device.

19. (previously presented) The method of claim 1, further comprising:

enabling user setting of a mode of processing and storage of documents from among a first mode and a second mode, wherein said first mode triggers a storage of complex subcomponents in both device-dependent and device-independent formats and the second mode stores all subcomponents in only device-independent format; and

triggering said automatic storage in device-dependent format only when said first mode is selected for processing, whereby subsequent presentations on the selected presentation device access the stored, device-dependent copies of the complex subcomponents to reduce presentation time.

20. (previously presented) The method of claim 1, wherein said parsing further comprises:

first parsing the document into one or more objects;

then parsing each object into one or more units, which represent the one or more subcomponents; and

determining a type of each of said subcomponents.

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***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chau Nguyen whose telephone number is (571) 272-4092. The Examiner can normally be reached on Monday-Friday from 8:30 am to 5:30 pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Heather Herndon, can be reached at (571) 272-4136.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. On July 15, 2005, the Central Facsimile (FAX) Number will change from 703-872-9306 to 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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